What is claimed is:

1. A redistribution package for connecting an integrated circuit chip to a circuit board, comprising:

a) an upper surface extending in a first plane and including a plurality of upper contacts disposed thereon for electrically interconnecting said upper surface to the integrated circuit chip;

b) a lower surface extending in a second plane and including a plurality of lower contacts disposed thereon for interconnecting the redistribution package to the circuit board; and

c) a plurality of conductors extending angularly through the redistribution package and interconnecting each of said plurality of upper contacts to corresponding ones of said plurality of lower contacts.

2. The redistribution package of claim 1, wherein said plurality of conductors includes signal carrying conductors, ground conductors and power conductors.

3. The redistribution package of claim 2, wherein said signal carrying conductors, said ground conductors, and said power conductors are positioned in respective concentric rings in all planes parallel to said first plane.

4. The redistribution package of claim 2, wherein each of said signal carrying conductors is surrounded by a plurality of ground conductors.

5. The redistribution package of claim 4, wherein each ground conductor is of a first cross-sectional width and a first cross-sectional thickness at a position adjacent to said upper surface and a second cross-sectional width and a second cross-sectional thickness at a position adjacent to said lower surface, wherein said first cross-sectional width is less than said second cross-sectional width and said first cross-sectional thickness is less than said second cross-sectional thickness.

6. The redistribution package of claim 1, wherein said first and second planes are essentially parallel to one another.

7. A redistribution package for connecting an integrated circuit chip to a circuit board, comprising:

a) an upper surface extending in a first plane and including a plurality of upper contacts disposed thereon for electrically interconnecting said upper surface to the integrated circuit chip;

b) a lower surface extending in a second plane and including a plurality of lower contacts disposed thereon for interconnecting the redistribution package to the circuit board;

c) at least one power layer essentially parallel to and coextensive with said upper surface for distributing power to the integrated circuit chip;

d) a power structure for providing power to said power layer;

e) a plurality of vias connected to said upper contacts each of which is electrically isolated from and extends through said power layer; and

f) a plurality of conductors extending through the redistribution package at a plurality of angles and interconnecting each of said plurality of vias to a corresponding one of said plurality of lower contacts, said plurality of conductors comprising signal conductors and ground conductors.

8. The redistribution package of claim 7, wherein said power structure comprises a plurality of power conductors.

9. The redistribution package of claim 7, wherein said at least one power layer includes at least two power layers.

10. The redistribution package of claim 9, further comprising at least one power via interconnecting said at least two power layers.

11. The redistribution package of claim 7, wherein said plurality of conductors includes signal carrying conductors, ground conductors and power conductors.

12. The redistribution package of claim 11, wherein said signal carrying conductors, said ground conductors, and said power conductors are positioned in respective concentric rings in all planes parallel to said first plane.

13. The redistribution package of claim 11, wherein each of said signal carrying conductors is surrounded by a plurality of ground conductors.

14. The redistribution package of claim 13, wherein each ground conductor is of a first cross-sectional width and a first cross-sectional thickness at a position adjacent to said upper surface and a second cross-sectional width and a second cross-sectional thickness at a position adjacent to said lower surface, wherein said first cross-sectional width is less than said second cross-sectional width and said first cross-sectional thickness is less than said second cross-sectional thickness.

15. The redistribution package of claim 7, wherein said first and second planes are essentially parallel to one another.